$$|c_i^{(1)}| = \frac{\pi H_1^2(y_c) Q_1'(y_c)(c_r^{(0)} - U_2)|v_1^{(1)}(y_c)|^2}{k^2 \, |U_1'(y_c)| \int \left[H_2 |u_2^{(0)}|^2 + H_2 |v_2^{(0)}|^2 + |p_2^{(0)}|^2/(g\rho\Delta\rho) \right] dy}$$